



GLAST Large Area Telescope:

Performance & Safety Assurance

Joseph Cullinan SLAC Performance & Safety Assurance Manager

cullinan@slac.stanford.edu (650) 926-5034



4.1.A P&SA – Significant Accomplishments April 2005

- Integration and Test
 - Supported integration of Towers A and B into flight grid
 - Supported efforts to develop two-tower testing
 - Completed inspection of current backlog of mechanical fabricated parts and I&T flight materials



- DAQ Electronics Coordinated MRB involvement to support troubleshooting, rework, inspection and retest efforts on TEM and TPS CCAs
 - NCR #367 Completed evaluation of circuit monitoring anomaly observed on qual TEM/TPS module.
 - Status: Ready to close with MRB concurrence
 - NCR #397 Completed rework/retest on 6 uncoated TPS CCAs in addition to TPS CCA from the qual TEM/TPS module to correct digital voltage oscillation problem. Rework will be performed on all TPS CCAs at SLAC prior to pre-conformal coat testing
 - Status: Ready to close with MRB Concurence. Will create new NCR as a lien against flight TPS boxes currently integrated to Towers A and B (these TPS CCAs need to be reworked)
 - NCR #431 Completed rework to remove and replace GTCC1 ASIC from s/n GT121 TEM CCA.
 - Status: Probable cause is ESD damage; DPA pending.
 - All rework documented on AIDS and NCRs; rework performed by personnel certified to NASA soldering standards.



4.1.A P&SA – Significant Accomplishments April 2005

- All first article internal harnesses have now been received from Glenair and inspected
 - Waiting for data packages for three first article harnesses
- 48 additional flight harnesses received from Glenair
 - Need to complete LAT QA inspection
- 60 flight harnesses received from CICON and inspected



- 79 TMCM's shipped from Teledyne for a total of 182 MCMs ۲ fabricated since February 2
 - MIP-1 (pitch adaptor to flex attach) rejection rate of 30 out of 248 (12%)
 - All 79 TMCMs received at SLAC have been shipped to INFN as of April 15
 - LAT QA continues to prioritize MCM and pitch adapter inspection at SLAC to support production schedule

Monthly Status Review – April

GLAST LAT Project



Issues and Concerns

- PSA Management Transition
 - Darren Marsh will provide QA management support to LAT during transition (50% in May, reduced support thereafter)
 - Joe Cullinan will provide program management a plan to update LAT QA personnel responsibilities and staffing needs required for QA coverage for program
 - Lowell and Joe to meet weekly to discuss LAT QA issues
- Flex cables
 - NCRs #428, #429 cracking observed in Omnetics connectors on Parlex flex cables
 - Manufacturing Readiness Review to be scheduled at Pioneer (second source of flex cables). LAT QA plans to support.



4.1.A P&SA – Planned Accomplishments May 2005

- Support TEM/TPS environmental testing -
 - Support vibration testing (Wyle Labs)
 - Support T/V testing of two TEM/TPS (chamber reconfiguration and validation), EMI/EMC and electrical performance testing for sell-off to I&T
- Support requalification of MCM production equipment
 - Teledyne plans to relocate MCM production line April 30
- Ensure MCM conformal coating process is validated subsequent to conformal coating facility change from Teledyne to Plasma Systems
- Update current LAT QA personnel responsibilities and short/long term staffing needs for LAT QA support for duration of program





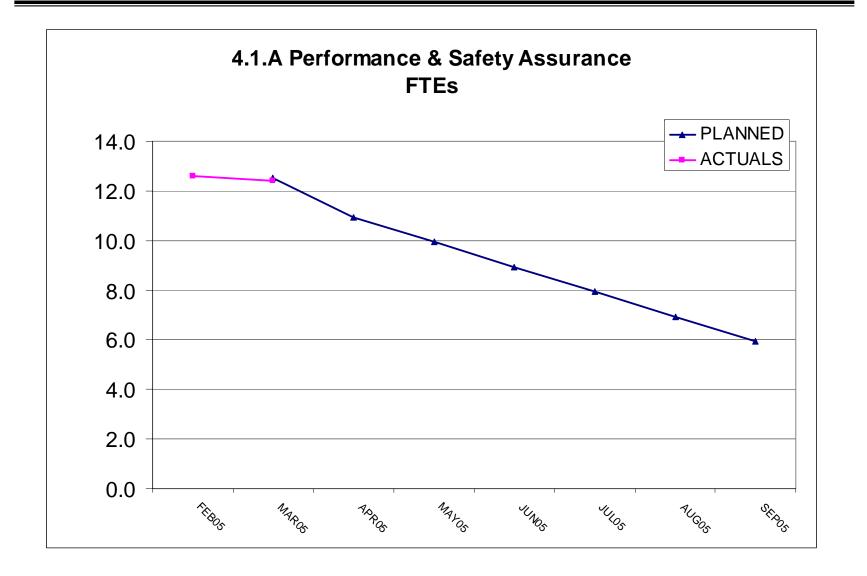
Cost Report

Reporting Category	Cost Incurred				Estimated Cost			Estimated Final Cost		Unfilled Orders
	During Month		Cum. to Date		Detail		Balance of		Contract	Outstanding
	Actual	Planned	Actual	Planned	APR05	MAY05	Contract	Estimate	Value	
4.1.A PERFORMANCE AND SAFETY ASSURANCE										
4.1.A.1 PERFORMANCE ASSURANCE MANAGEMENT	18	21	746	770	19	19	101	885	885	
4.1.A.2 QUALITY ASSURANCE	198	182	2,132	2,159	161	84	319	2,696	2,696	1
4.1.A.3 TRAINING			14	14			0	14	14	
4.1.A.4 RECORDS MANAGEMENT	-1		42	42			0	42	42	
4.1.A.5 SYSTEMS SAFETY			0	0			0	0	0	
4.1.A.6 EEE PARTS CONTROL PROGRAM			210	210			0	210	210	
CAPW[3]Totals:	215	203	3,144	3,194	179	103	420	3,846	3,846	1

Monthly Status Review – April



4.1.A FTE Chart



Monthly Status Review – April



Cost Variance Explanation

- Why underrun
 - Late contract invoices
- What will be done to correct?
 - No corrective action required